New Hypothesis of Monozygotic Twinning Suggests Unexpected Source of Female Fertility Issues

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Simon Edwards
Research Acceleration Initiative

Introduction

A present-day assumption concerning monozygotic twinning holds that zygotic division occurs at some point after implantation and that it is internally-driven, perhaps with mRNA expression underpinning the relatively rare, spontaneous splitting of a zygote. This assumption is not supported by direct observation. The mechanism behind the genesis of monozygotic multiple pregnancies is difficult to study given that IVF implantations are timed to coincide with the beginning of a woman's monthly window of fertility rather than at the extremely early or late boundary of that window. Natural pregnancies leading to monozygotic twin pregnancies do not tend to provide much in the way of useful statistical data pertaining to when implantation occurs with relation to the would-be start date of menstruation as there is no practical means of observing implantation and zygotic splitting in-vivo. Garnering data of this nature would be useful for confirming this author's hypothesis.

Abstract

External electrical forces may be responsible for the detachment of zygote cells from initial zygotes at around the time of implantation. Zygotic cells, being that they are made coherent by van der Waals forces, may lose their coherence as the result of proximity to particles of positive electrical charge. A likely source of these positively charged particles would be iron molecules ionized by the escape of oxygen from degrading menstrual blood associated with the lining of the uterus. As red blood cells break down, oxygen and iron separate, leading to a charge differential. Positively charged iron molecules are liberated within the uterus.

If, perchance, these positively charged iron molecules interact with zygotes at around the time of implantation, some cells may detach from the overall zygote. These cells run the risk of failing to attach to the uteran wall. Furthermore, a sufficiently ionized mass of iron can exert sufficient electrical force to briefly negate van der Waals forces for all of the cells of the zygote, including those responsible for its overall bond with the uteran wall. In both cases, this phenomenon would either fail to lead to the genesis of viable identical twins or, worse, lead to the miscarriage of the pregnancy entirely.

The relative rarity of monozygotic twinning as well as certain female fertility problems may both be explained by a single phenomenon: Incomplete shedding of the uterus during the menstrual cycle leading to the saturation of uteran tissues with positively ionized iron molecules. The chance of pregnancy after menstruation but prior to expected ovulation is limited not only by a lesser (but non-zero) chance of ovulation at this time, but

additionally, the continued presence of detritus from the previous menstruation.

This hypothesis may be reinforced by confirming whether women who give birth to identical twins subsequently report fertility issues, whether identical twins are more common when implantation occurs just before or just after menstruation and, of course, by attempting to bring about the detachment of zygotic cells using ionized iron in-vitro.

While the ability to deliberately bring about monozygotic twinning in-vitro may have some limited application for those seeking very specific results from an IVF implantation, it stands to reason that approaches that are designed to increase the likelihood of ionized iron molecules becoming prevalent in the uteran environment, while they may increase the likelihood of monozygotic twin pregnancies versus other pregnancy types, would dramatically reduce the chances of term pregnancy to such an extent that such a therapy would, in-vivo, do more to harm fertility than good.

If this hypothetical understanding can be confirmed, the greatest practical application would be the prevention of failed implantations by taking measures to reduce the likelihood that positively ionized iron molecules will persist in the uteran environment. Therapies ranging from those which encourage more complete uteran shedding to those which seek to negatively ionize the contents of the uterus may both be effective for amelioration of this potential cause of female fertility issues, the hallmark of which I suspect, ironically is the occasional production of identical twins.

Conclusion

Monozygotic twinning is looked upon by both laymen and medical professionals as a generally positive and even miraculous event with twinning being generally associated with a higher degree of fertility. If my hypothesis of monozygotic twinning is correct, identical twins should be, conversely, viewed as a potential harbinger of future fertility problems rather than a clinically irrelevant chance event or even a lucky happenstance.

Further study into this matter may lead to the discovery of new solutions to female infertility.